WHAT IS CLAIMED IS

1. An adhesive tape comprising a substrate and an adhesive layer formed on at least one side of the substrate, wherein the substrate comprises an olefin polymer and a flame retardant, but substantially no halogen atom, and the adhesive tape has a thermal deformation at 100°C of not more than 65%.

2. The adhesive tape of claim 1, which has an elongation at break of not less than 150% at a tension speed of 300 mm/min.

3. The adhesive tape of claim 1 or claim 2, wherein the olefin polymer comprises the following Component A and Component B:

Component A: a thermoplastic resin having a carbonyl oxygen atom in the molecular skeleton

Component B: a polymer alloy containing an ethylene component and a propylene component.

4. The adhesive tape of claim 3, wherein the Component B has a dynamic storage modulus (E') at 80°C of not less than 40 MPa and less than 180 MPa, and a dynamic storage modulus (E') at 120°C of not less than 12 MPa and less than 70 MPa.

5. The adhesive tape of claim 3, wherein the Component B has a dynamic storage modulus (E') at 23°C of not less than 200 MPa and less than 400 MPa.

6. The adhesive tape of claim 3, wherein the Component A is an ethylene copolymer or a metal salt thereof, having a melting point of not more than 120°C, which is obtained by polymerizing a vinyl ester compound, or an α,β-unsaturated carboxylic acid or a derivative thereof, or the vinyl ester compound and the α,β-unsaturated carboxylic acid or a derivative thereof.

7. The adhesive tape of claim 3, wherein the Component A and the Component B are mixed at a weight ratio (A:B) of 1:9 - 8:2.

8. The adhesive tape of claim 1 or claim 2, wherein the flame retardant is added in an amount of 20 - 200 parts by weight per

100 parts by weight of the olefin polymer.

9. The adhesive tape of claim 1 or claim 2, wherein the flame retardant is a metal hydroxide.

10. The adhesive tape of claim 1 or claim 2, which has a dynamic storage modulus (E') at 80°C of not less than 25 MPa and a dynamic storage modulus (E') at 120°C of not less than 10 MPa.

11. The adhesive tape of claim 1 or claim 2, wherein the substrate is not crosslinked during or after a forming process thereof.

12. A substrate for an adhesive tape, which comprises an olefin polymer and a flame retardant, but substantially no halogen atom, wherein the olefin polymer comprises the following Component A and Component B:

Component A: a thermoplastic resin having a carbonyl oxygen atom in the molecular skeleton

Component B: a polymer alloy containing an ethylene component and a propylene component.

13. The substrate of claim 12, wherein the Component B has a dynamic storage modulus (E') at 80°C of not less than 40 MPa and less than 180 MPa, and a dynamic storage modulus (E') at 120°C of not less than 12 MPa and less than 70 MPa.

14. The substrate of claim 12, wherein the Component B has a dynamic storage modulus (E') at 23°C of not less than 200 MPa and less than 400 MPa.

15. The substrate of claim 12, wherein the Component A is an ethylene copolymer or a metal salt thereof, having a melting point of not more than 120°C, which is obtained by polymerizing a vinyl ester compound, or an α,β-unsaturated carboxylic acid or a derivative thereof, or the vinyl ester compound and the α,β-unsaturated carboxylic acid or a derivative thereof.

16. The substrate of claim 12, wherein the Component A and the Component B are mixed at a weight ratio (A:B) of 1:9 - 8:2.

17. The substrate of claim 12, wherein the flame retardant is added in an amount of 20 - 200 parts by weight per 100 parts by weight of the olefin polymer.

18. The substrate of claim 12, wherein the flame retardant is a metal hydroxide.

19. The substrate of claim 12, which has a dynamic storage modulus (E') at 80℃ of not less than 25 MPa and a dynamic storage modulus (E') at 120℃ of not less than 10 MPa.

20. The substrate of claim 12, which is not crosslinked during or after a forming process thereof.